What is claimed is:

1. A color laser display comprising:

a red laser light source for emitting red laser light;

a green laser light source for emitting green laser light;

a blue laser light source for emitting blue laser light;

modulation means for modulating said red laser light, said green laser light, and said blue laser light, based on a red image signal, a green image signal, and a blue image signal;

a screen for displaying red, green, and blue when irradiated with said red laser light, said green laser light, and said blue laser light; and

projection means for projecting said red laser light, said green laser light, and said blue laser light onto said screen so that an image, carrying said red, green, and blue image signals, is displayed on said screen;

wherein an excitation solid laser unit, having a solid-state laser crystal doped with Pr^{3+} and a GaN semiconductor laser element for exciting said solid-state laser crystal, is employed as at least one of said red laser light source, said green laser light source, or said blue laser light source.

2. A color laser display according to claim 1, wherein said excitation solid laser unit emits laser light of wavelength 600 to 660 nm by a transition of $^3P_0$ -> $^3F_2$ or $^3P_0$ -> $^3H_6$ and is employed as said red laser light source.

3. A color laser display according to claim 1, wherein

said excitation solid laser unit emits laser light of wavelength 515 to 555 nm by a transition of $^3P_1$ -> $^3H_5$ and is employed as said green laser light source.

4. A color laser display according to claim 2, wherein said excitation solid laser unit emits laser light of wavelength 515 to 555 nm by a transition of $^3P_1$ -> $^3H_5$ and is employed as said green laser light source.

5. A color laser display according to claim 1, wherein said excitation solid laser unit emits laser light of wavelength 465 to 495 nm by a transition of $^3P_0$ -> $^3H_4$ and is employed as said blue laser light source.

6. A color laser display according to claim 2, wherein said excitation solid laser unit emits laser light of wavelength 465 to 495 nm by a transition of $^3P_0$ -> $^3H_4$ and is employed as said blue laser light source.

7. A color laser display according to claim 3, wherein said excitation solid laser unit emits laser light of wavelength 465 to 495 nm by a transition of $^3P_0$ -> $^3H_4$ and is employed as said blue laser light source.

8. A color laser display comprising:

a red laser light source for emitting red laser light;

a green laser light source for emitting green laser light;

a blue laser light source for emitting blue laser light;

modulation means for modulating said red laser light, said green laser light, and said blue laser light, based on a

red image signal, a green image signal, and a blue image signal;

a screen for displaying red, green, and blue when irradiated with said red laser light, said green laser light, and said blue laser light; and

projection means for projecting said red laser light, said green laser light, and said blue laser light onto said screen so that an image, carrying said red, green, and blue image signals, is displayed on said screen;

wherein a fiber laser unit, having a fiber with a Pr^{3+}-doped core and a GaN semiconductor laser element for exciting said fiber, is employed as at least one of said red laser light source, said green laser light source, or said blue laser light source.

9. A color laser display according to claim 8, wherein said fiber laser unit emits laser light of wavelength 600 to 660 nm by a transition of $^3P_0 \rightarrow {}^3F_2$ or $^3P_0 \rightarrow {}^3H_6$ and is employed as said red laser light source.

10. A color laser display according to claim 8, wherein said fiber laser unit emits laser light of wavelength 515 to 555 nm by a transition of $^3P_1 \rightarrow {}^3H_5$ and is employed as said green laser light source.

11. A color laser display according to claim 9, wherein said fiber laser unit emits laser light of wavelength 515 to 555 nm by a transition of $^3P_1 \rightarrow {}^3H_5$ and is employed as said green laser light source.

12. A color laser display according to claim 8, wherein

said fiber laser unit emits laser light of wavelength 465 to 495 nm by a transition of $^3P_0$ -> $^3H_4$ and is employed as said blue laser light source.

13. A color laser display according to claim 9, wherein said fiber laser unit emits laser light of wavelength 465 to 495 nm by a transition of $^3P_0$ -> $^3H_4$ and is employed as said blue laser light source.

14. A color laser display according to claim 10, wherein said fiber laser unit emits laser light of wavelength 465 to 495 nm by a transition of $^3P_0$ -> $^3H_4$ and is employed as said blue laser light source.

15. A color laser display comprising:

a red laser light source for emitting red laser light;

a green laser light source for emitting green laser light;

a blue laser light source for emitting blue laser light;

modulation means for modulating said red laser light, said green laser light, and said blue laser light, based on a red image signal, a green image signal, and a blue image signal;

a screen for displaying red, green, and blue when irradiated with said red laser light, said green laser light, and said blue laser light; and

projection means for projecting said red laser light, said green laser light, and said blue laser light onto said screen so that an image, carrying said red, green, and blue image signals, is displayed on said screen;

wherein a semiconductor laser unit is employed as at least one of said red laser light source, said green laser light source, or said blue laser light source, and said semiconductor laser unit includes an excitation light source constructed of a semiconductor laser element employing a GaN semiconductor in its active layer, and also includes a surface-emitting semiconductor element for emitting laser light when excited with said excitation light source.

16. A color laser display according to claim 15, wherein said surface-emitting semiconductor element of said semiconductor laser unit has an active layer composed of InGaAlP or InGaP, said semiconductor laser unit being employed as said red laser light source.

17. A color laser display according to claim 15, wherein said surface-emitting semiconductor element of said semiconductor laser unit has an active layer composed of InGaN, said semiconductor laser unit being employed as said green laser light source and/or said blue laser light source.

18. A color laser display according to claim 16, wherein said surface-emitting semiconductor element of said semiconductor laser unit has an active layer composed of InGaN, said semiconductor laser unit being employed as said green laser light source and/or said blue laser light source.

19. A color laser display according to claim 15, wherein said surface-emitting semiconductor element of said semiconductor laser unit has an active layer composed of GaN,

GaNAs, or InGaNAs.

20. A color laser display according to claim 15, wherein said semiconductor laser element of said semiconductor laser unit has an active layer composed of InGaN, GaNAs, or InGaNAs.

21. A color laser display according to claim 16, wherein said semiconductor laser element of said semiconductor laser unit has an active layer composed of InGaN, GaNAs, or InGaNAs.

22. A color laser display according to claim 17, wherein said semiconductor laser element of said semiconductor laser unit has an active layer composed of InGaN, GaNAs, or InGaNAs.

23. A color laser display according to claim 19, wherein said semiconductor laser element of said semiconductor laser unit has an active layer composed of InGaN, GaNAs, or InGaNAs.

24. A color laser display according to claim 15, wherein said semiconductor laser element of said semiconductor laser unit has a stripe width of 5 μm or more.

25. A color laser display according to claim 16, wherein said semiconductor laser element of said semiconductor laser unit has a stripe width of 5 μm or more.

26. A color laser display according to claim 17, wherein said semiconductor laser element of said semiconductor laser unit has a stripe width of 5 μm or more.

27. A color laser display according to claim 19, wherein said semiconductor laser element of said semiconductor laser unit has a stripe width of 5 μm or more.

28. A color laser display according to claim 20,

wherein said semiconductor laser element of said semiconductor laser unit has a stripe width of 5 μm or more.